



The Leaflet

Newsletter of the Morgan Arboretum

Spring 2014

The Crow Lady	2
Climate Change, cold-blooded creatures and migration	3
Emerald Ash Borer	7

Looking forward to change

By Jim Fyles, Arboretum Director

OK. So maybe it is just me getting old, but the woods seem to be changing.

In the courses we teach on Campus we always talk about the forest as being 'dynamic', constantly changing. Yet when we visit the Arboretum we have to make a great effort to convince students that change is, in fact, occurring. "You can see in this stand that the canopy is of poplar and birch, the pioneers; but the seedlings and saplings are maple and beech, the later successional species." we say. "Eventually the pioneers will die and the species that can tolerate shade will dominate. The forest is dynamic. ". But in reality change in the forest is not usually something that jumps out at us.

In fact, the constancy of the woods is one of the things that we love about them. This week, the maples sprouted buckets, just like they have for years and years. We can't remember when they didn't. In a few weeks the woods behind the quarry will fill with trilliums and trout lilies; we visit them every year. They are wonderful. We all know favorite forest spots, and we return to them with the expectation that they will be there, just the same as always.

Last fall I was surprised out of this sort of reverie when I took my class on the first field trip of the term. We always visit the stand of mixed hardwoods just below the slope near where the orange trail enters the woods. My classes started collecting data related to the trees in this stand around 1992. There used to be a lot of big paper birch, which allowed us to talk about pioneers and forest succession. So why was it a bit of a shock this year to be talking about pioneers and then realizing that the pioneers were mostly lying on the ground, sprouting mushrooms? Succession really happens. Who would have thought?

But forest change is not always so slow. If you have been watching, you will have seen that, over the past few years, many of our lovely beech trees have been succumbing to beech bark disease. There is nothing that we can do about it except enjoy seeing the woodpeckers that thrive on the bugs that shelter under the peeling bark.

This spring, we are starting to pay serious attention to another wave of change that will happen in the Arboretum over the next few years. The Emerald Ash Borer has not arrived yet, as far as we know, but will get here soon. When it does, we will begin to lose our ash trees. We may be able to protect a few important specimens, but most of the trees in the woods will become insect habitat. In preparation, we will start this year to transform certain stands in which ash is abundant by removing trees that are suppressed or unhealthy, in order to benefit other tree species. Also we are starting a variety of tree species in the nursery so that we can plant into the stands that will be affected by this beetle.

By planning ahead and managing the woods carefully we hope to cushion the effects of this coming change, and while we watch it unfold, not lose that feeling of timelessness that a walk in the woods gives us.

THE PLANT SALE

An annual rendez-vous
with John Watson
to discuss
your gardening projects
and visit
the Arboretum nursery

For members only
on April 25 & 26

Public sale
on May 2 & 3

9:00 - 16:00

The Crow Lady

By Betsy McFarlane

Betsy McFarlane walks her dog every morning in the Arboretum. A certified translator, she also volunteers at the McGill Bird Observatory as a census observer, edits Arboretum publications and does other bird-related volunteer work.

If you see a tall, elegant, silver-haired lady from France in the Arbo who seems to be talking to the trees, don't be alarmed. She's actually talking to the crows. My friend Yolande has been feeding a small flock of Arbo crows for almost a decade and has developed an unusual relationship with them.

Usually, the American Crow is extremely wary of humans. This highly intelligent and social bird is a member of the Corvid family, which also includes our familiar Blue Jay and Common Raven. American Crows are leery of humans and for good reason as in some jurisdictions it is legal to hunt them. Crows have long been considered pests or nuisance birds in North America, mainly due to the damage they cause to crops, although, to their credit, they also consume crop pests. Consequently, they have been widely hunted, or poisoned. Sometimes they are just shot for fun; for example, the municipality of St. Lazare has a March crow hunt that is a yearly "event" for hunters.

Yolande's relationship with the crows began—as do so many other Arbo stories—because of her dogs. Her Charlie, a typical German Shepherd, was over-energetic at times but loved to work. Yolande was able to channel this energy by giving him a job, tossing acorns at him, which he would catch in his mouth. Yolande's other dog, Chloe, a Doberman, was extraordinarily obsessed with food and prone to raiding the Arbo garbage cans and sometimes even the food tables of film crews, resulting in some expensive vet bills for Yolande.

Since collecting fallen acorns was extremely labour intensive, Yolande began tossing cat kibble to both dogs. This killed two birds with one stone, so to speak—putting Charlie to work and keeping Chloe away from the garbage cans. When Yolande was near the Conservation Centre (CC), with its overflowing garbage cans, she became a proverbial fountain of flying food. This, in turn, attracted the attention of another species, *Corvus brachyrhynchos*.

American Crows are omnivorous, feasting on everything from



The American Crow, a social bird Photo: Richard Gregson

earthworms, insects, rodents, aquatic animals, seeds, fruit, garbage and carrion, to eggs and chicks robbed from other birds' nests. Cat food, which is fairly high in protein, would not be out of place in their diet. Yolande soon had a small coterie of crows that would wait for her near the CC, but at a discrete distance, collecting what Charlie and Chloe had left.

In time, they became bolder and would fly to nearby trees when she came up the hill to the CC. Yolande is a kind soul (although she retired 20 years ago from her position as a Human Resources executive for a pharmaceutical company, her former employees are so fond of her that they put on birthday parties for her every year). So, she began to toss the crows some kibble while the dogs were not looking. The crows would wait until the coast was clear and then fly to the ground to feast. Soon, Yolande's feathered friends would be waiting for her in the dog parking lot when she arrived, which was usually at the same time every morning, and, in turn, she would oblige them with some kibble. The unusual relationship was solidified.

Next, the crows began following Yolande—and whoever was walking with her—around almost half of the Arboretum. After meeting her in the dog parking lot (they seem to be able to recognize her different cars over the years), they would escort her across the field and along the first part of the Main Road. Then, they would disappear for a while and reappear on the other side of the Arboretum, near Blossom Corner, and accompany her up the road to the CC and back to her car, flying from tree to tree. When she took a different route, such as the Yellow Trail, they would quickly catch on and meet her on the other side.

Continued on page 6

& Climate Change cold-blooded organisms

By Chris Cloutier, Naturalist

Global climate change has been a fairly regular topic in most newspapers and TV and radio broadcasts for several years now. Many of us dismiss climate change as being purely related to temperature, but scientists have been studying the effects of climate change for many years. With regards to animal life, climate change will be a very serious problem, maybe not tomorrow, but in the near future. Animal movements, invasive species, pest outbreaks and disease transmission are just a few of the topics being studied. Most of us only really hear about how climate change affects large charismatic mammal species such as polar bears and belugas, but many smaller critters are also feeling the effects, and this may even have a more direct impact on us.

Organisms, especially cold-blooded ones, rely heavily on ambient temperature and climate. Severe fluctuations in average temperatures, to either extreme, can be life threatening to cold-blooded animals. In some cases, even minor deviations can interfere with their day-to-day activities such as feeding, reproduction and movement. Some of the most talked about cold-blooded critters of the Arboretum are certainly the mosquitoes. In early June, the **mosquito** emergence is well under way. But how does this relate to temperature and climate?

The mosquito is considered to be an aquatic insect for the most part, with the larvae developing in bodies of standing water ranging from ponds and calm lake-shores to rain puddles, discarded tires and improperly-stored plant pots. The amount of water present in a given spring will determine the number of areas that are suitable for larval development, and this is a direct result of the amount of snow cover received the preceding winter and the amount of precipitation expected in the spring. Most temperate species of mosquitoes develop from egg to adult in the space of roughly 2-3 weeks. This cycle may become even shorter when warmer temperatures cause the insects' metabolism and cellular activity to increase; thus, spring temperatures play an important role in determining growth

Continued on page 5

& migration

Climate change is slowly but surely becoming a reality that cannot be dismissed. On the bright side, climate change has brought about an increase in biodiversity in our northern latitudes. In Massachusetts, a vast study conducted over twenty years has shown that certain species have tended to increase in the northern portions of their distribution range whereas they have decreased in their southernmost locations. Because the distributions of many of our native species reach their northernmost limits here in southern Canada, changes in the climate can translate into an increase in biodiversity. Cold-blooded creatures such as insects are among the most sensitive to climate and their shorter life cycle allows them to adapt to change more rapidly than vertebrates do. This would explain the northern migration of about ten new species of butterflies in the last decade, including the spectacular Giant Swallowtail, which was first noticed in Montreal in 2012.

What else is coming our way? All kinds of things: viruses, bacteria, mushrooms, plants, birds, mammals; which can be identified as predators, prey, pathogens or parasites. How these organisms will interact as they migrate into new habitats cannot be predicted. By increasing the size and number of protected areas, and by providing north-south corridors to allow for movement between protected areas, the migration of native flora and fauna will be facilitated, thereby favoring the preservation of our natural heritage. We ourselves will have to adapt and learn to live with new organisms in the changing environment. We will also have to find ways to try and contain pest invasions such as the Emerald Ash Borer on our island.

Daniel Berteaux from the Université du Québec à Rimouski in collaboration with Sylvie de Blois from McGill University has recently published a book on how climate change is likely to affect our natural environment. Their team has compiled observations gathered by naturalists from across the province and has studied trends in the migration of species. The mammals and birds that are currently rare in Quebec but are forecast to become more common include the Grey Fox, Southern Flying Squirrel, White-footed Mouse, Virginia Opossum, Tufted Titmouse, Carolina Wren and Orchard Oriole. This team of biologists has also produced a [web site](#) that shows how their models can forecast the changes in the distribution of hundreds of species of plants, amphibians and birds. Check out what the predictions are for species that interest you.

Anne Godbout

Berteaux, D. et al. 2014, [Changements climatiques et biodiversité du Québec](#), Presses de l'Université du Québec.

Leboeuf, M. 2014, [Demain, les envahisseurs!](#), Blogue Cercle scientifique, Agence Science-Presses.

Maciek Zarzycki
Pharmacien-propriétaire

88, rue Ste-Anne
Ste-Anne-de-Bellevue (Québec) H9X 1L8

T 514 457-5681 F 514 457-8357

affilié à :

www.animal911.ca

HÔPITAL
11400 boul. Gouin Ouest
Roxboro, Québec, H8Y 1X8
514.685. VETS (8387)

BUREAU
566 boul. Jacques-Bizard
Ile Bizard QC H9C 2H2
514.696.2004

514.685. VETS
(8387)

**Innovative Installation Systems for
Ceramic and Natural Stone Tile**

Schluter Systems (Canada) Inc.
21100 chemin Ste-Marie, Ste-Anne-de-Bellevue, QC H9X 3Y8
Tel.: 514-459-3200 | Fax: 877-667-2410 | email: info@schluter.com
[www.schluter.com](#)



Donors

The MAA gratefully acknowledges these individuals and organizations who supported its mission in 2013-2014 through their generous contributions of money, plants, equipment and services. In addition to the donors listed below, 60 individuals have contributed donations of less than \$50 for a total of \$1,536. The sum of every dollar invested has an impact on the perpetuity of the Arboretum.

MUNICIPAL	CAROLINE BEGG	DOUGLAS MCRAE & ANDREA DE GOSZTONYI	HENRY B. & MELODIE YATES	CAROLYN FLETCHER	LOIS MAEDER-ALVES & PETER ALVES
SAINTE-ANNE-DE-BELLEVUE	HANS BERGER	DAVID & CLAIRE MOLSON	JEANNINE & RICHARD YOUNG	LYNN FOSS	ISABEL MAICAS
SENNEVILLE	BARBARA A. BLACK	EDOUARD MONTPETIT		CLAUDETTE FOURNIER & MOHAMMED GHARBI	JEAN MARIER & LISA POTHIER
CORPORATION	CAROLE BOUCHER & PAUL BILODEAU	LOUIS & LOUISE MORIN	BRONZE \$ 50 ≤ x < \$ 100	HUBERT GENDRON	WAYNE & JANET MCCARTNEY
DOMINION & GRIMM	JACQUES L. BOUCHER & ELAINE CHUBRY	COLIN MURRAY	WILLIAM ABBA	PETER & DOROTHY GLOUTNEY	CLARE & THOMAS MCFARLANE
ECHO POWER EQUIPMENT	SUSAN CHILDS	DENISE PALISAITIS	PETER ABONYI & DENISE VERMETTE	CATHERINE GODON	GAIL MCLEOD-GERMAIN & PATRICK GERMAIN
FPINNOVATIONS	HILDA COLLINS	ANNE PALLÉN	MARGOT ADAIR	CLARE GODON	KARINE MONGRAIN & MATHIEU GELINAS
JARDIN CLEROUX	DENIS CREVIER	GEORGE PANCIUK	JENNIFER ANSTEAD	PATRICK GODON	DEBBIE MONTAGUE & KENNETH DUNKLEY
MDA CORPORATION	RUDI & HEIDI DALLENBACH	WILLIAM & RUTH PARSONS	DEBRA ASTROFF	LINDA & DAVID GOODMAN	LOUISE MORIN & SERGE LAPORTE
MORI NURSERIES	MICHAEL & KIM DAVIDMAN	PHARAND AUTO CAMION	DONALD & PATRICIA BAIRD	JILL GOWDEY	HILARY MUNRO
PEPINIERE CRAMER NURSERY	HELENE DESPAROIS & JOSEPH BLAIN	CARL POMERANTZ & RONDA FISHER	JOCELYN BARCLAY	JEAN LE GUILLOU	GERRY & GERALDINE MURPHY
SCHLUTER SYSTEMS CANADA	KEVIN DOHERTY	ANDREW PORTER	ROBERT & KAREN BAZOS	INGE & PERTTI HAAPAMAKI	MICHAEL NEWMAN
PLATINUM x ≥ \$ 1000	PHILLIPE DRUELLE & JULIE ST-PIERRE	ALAIN & ANNEKE PRAT	ROSALYN BEAUDOIN & PIERRE DUHAMEL	EDITH HAMMELBECK	FRED & MARNA PENNELL
ESTATE OF ARCHIBALD ROY CAMPBELL JONES	SHAN EVANS & RAMAN NAYAR	BETIE LOU READE	ERIC & PATRICIA BENDER	JOANNE HANNON & NICK THORNE	HELENE QUAID
ANN GRAINGER	JAMES & HELEN FYLES	CONNIE ROBERTS	TREVOR & BARBARA BISHOP	BARBARA HERMON	SHIRLEY SKILLING
ROBERT JOHNSON	PAUL & SHARI GAGNE	ROBERT & DIANNE ROBINSON	CHANTAL BOUTHAT	DAVID & JUDY HOLLAND	DOUG SMITH
GOLD \$ 500 ≤ x < \$ 1000	SHIRLEY GAVLAS & PIERRE MARTIN	COLIN ROSS	WILMA BROWN	HOUSE OF WOODS	JAMES M. & SUSAN SMITH
ROBERT ABOUD & INGRID LAMARRE	FRANCINE GELINAS	JOHN & ALINE ROWEN	LILIANE BRUNETTI & STEVE BURNS	KIM HUME	DANA SMITH & MARY RIGGIN
MIDORI AOKI & RICHARD HAVAS	MAIA GODON	YSABEL RUPP	BONNIE CAMPBELL & GILLES DURUFLE	SANDRA HUTCHINSON & PHILLIP MARCOVITCH	SALLY SOCKETT
CHARLES A. CASEY	BARBARA GRAVES	DON & JEAN SANCTON	PHILIP CAPREOL	CHRISTL JEMELKA	THOMAS SPRACKLIN
WALLACE DENVER	GEORGE & BARBARA GUILLON	PIERRE SAUVE	TREVOR & MARGARET CARON	PENELOPE KAMICHAITIS	ROBIN & CATHERINE STEWART
BARBARA FOWLER THE GARDEN CLUB OF MONTREAL	MEREDITH & JUDY HAYES	CHARLOTTE SCHMID	HELEN CARROLL	WERNER & LOUISE KELLER	ELIZABETH THOMPSON
CAROL LAPPIN	HOMETREE SERVICES	IAN SCOTT	LAUREL CHAUVIN-KIMOFF & JOHN KIMOFF	WAYNE KILBOURNE	MARLENE & SAUL TICKTIN
PATRICE PELLERIN & SHEILA SUZUKI	RALPH & KAREN HOSKER	ROBERT SCULLY	MARIE-BELLE & NORMAN CUNNINGHAM	URSULA & ERICH KRAYER-KRAUSS	DAWSON TILLEY
STELLA-JONES INC.	ERNEST HOWARD	FRANCOIS & JEANNE SENECAI-TREMBLAY	PATRICIA DAVEY	BEVERLEY KYLE & ROBERT MARIEN	MARISA D'EMILIO TROTTIER & MARC TROTTIER
ARNOLD ZWAIG & STEPHANIE HAMEL	SARAH H. HURDLE	ARTHUR & MARION E. SHAMA	ANDRE DE L'ETOILE & GUYLAINE BRUNET	RICHARD LAFLEUR & MANON BERNARD	LEON VAN DER ROEST
SILVER \$ 100 ≤ x < \$ 500	MAURICE & JUDITH JAQUES	BARBARA SHAPIRO	HENRY DEFALQUE & MARIE-CHANTAL WANET	WALTER F. & IRENE LAMBERT	MARTHE & ALAIN VERRON
CHARLES & JENNY ANDERSON	FRED & VANDA KAYSER	DAWN SMITH	JOHN G. DENNETT	JOSEE LANOUEETTE	WILLIAM VICKERY & JUDITH NOWLAN
DAPHNE ARDELL	RUTH A. KNOWLES	JIM & MARILYN TOOLEY	KELLY DOHERTY & RICHARD HOY	WILLIAM & CLAUDETTE LAWAND	MARY VITOU
AINO ARIK	MYLENE KOSSEIM	JEAN-RENE VAN BECELAERE & BRIGITTE AUZERO	JOHN D. DOREY	NICOLE LEFEBVRE & SYLVAIN CARDINAL	MICHAEL & LILLY VONNIESSEN
IAN & VERA ASTON	HEINZ B. & ELAINE LEDERMANN	NICOLE VINET	KELLY DOHERTY & RICHARD HOY	MILTON LILLO	SIGNA VOYER
SYDNEY BALL	LENORE LEWIS & GERALD VAN DER WEYDEN	GEOFFREY WEBSTER	JOHN D. DOREY	NANCY LLOYD	DOUGLAS & CONNIE WALKINGTON
DANIELLE BEAUDRY & JEAN-CLAUDE LAJEUNIE	BARBARA LUDWINOWSKA	DAVID WEBSTER	ANITA & KEITH DUNN	TRACY H. & JOHANNAH LLOYD	MARY WELLS
	IAN & MARNEY MACDONALD	GREG & DALE WEIL	CAROL EDWARD & ANDREW MORROW	ANNE LOCKWELL & JURIS TERAUDS	NATHANIEL WHITCOMB & AREZO BIDARBAKHT
	BARBARA & DON MACDUFF	MICHAEL & MARGARET WESTWOOD	ROBERT & WINNIFRED EMMETT		ANDREA & MICHAEL WINLO
	JIM & BARBARA MARCOLIN				JOHN & DIANA WOOD
	NEIL & ISOBEL MCDERMID				

Donation Amounts

Commemoration:	\$3,390	Trail Improvement Fund:	\$2,903	For a total of:
Arbo 50 Endowment Fund:	\$7,139	Road Improvement Fund:	\$2,746	\$30,706
Benefactor & Sustaining:	\$7,330	General:	\$7,198	Thank you!

Continued from page 3

rates from year to year. With insects as prolific as mosquitoes, this could mean more generations within a given year, or at least greater amounts of individuals reaching adulthood, because the faster they develop, the less chance they have of being consumed by natural predators lurking in their watery nurseries.

I’m sure that, by now, many of you have also heard about West Nile Virus (WNV). This viral infection has certainly been garnering more attention recently. Over the last few years, cases of WNV have gone up, even here in southern Canada. The infection typically begins and ends in the bird population, but with global climate change, things are expected to deviate from the norm. In some cases, people have contracted the virus through the bites of infected mosquitoes. Thankfully, the majority of people infected will show no symptoms at all while some may develop fever-like symptoms, and very few (<1%) will develop more serious ailments (Centers for Disease Control and Prevention, 2014). Although this is not considered to be a life- threatening infection, it is still wise to protect yourself as best you can

when entering areas with mosquitos. Wearing light-colored clothing is helpful and long sleeves and long pants are also effective, since any layer between you and the mosquito can easily reduce the number of bites. One of the best means of protection, insect repellent, can be very effective, but it is also important to choose the brand and concentration suitable for you. By following these few steps, you are well on your way to making your summer much more pleasant, enjoyable and safe.

Another group of cold-blooded critters starting to make the headlines in recent years are **ticks**. Unlike mosquitoes, ticks are arachnids, but similar to mosquitoes, they will also take blood meals from vertebrates in order to grow and reproduce. Although not as numerous as mosquitoes, ticks can certainly be a nuisance if you are in the right (or I guess wrong) location. For many years, ticks have been linked to the spread of several diseases, most notably Lyme disease, a bacterial infection that has not been detected on the island of Montreal yet but has been found in surrounding areas. Lyme affects several thousand people annually in the United States and the areas with the highest infection rates are typically in the Northeast.

The transmission cycle for Lyme disease involves several key players; white-tailed deer, small rodents, (typically mice), and the bridge between them, the ticks that they carry. Ever so often people will step into the mix and become an incidental host for ticks, and can contract the disease this way.

Continued on page 7

PRÉSERVATION DES ARBRES MATURES
CARE AND PRESERVATION



Arborfolia

-Élagage/Pruning

-Fertilisation/PHC

-Haubanage/Tree Guying

-Plantation & Evaluation

Jesse Bouchard-Nestor

Arboriculteur certifié

certified arborist

QU-0102A



WWW.ARBORFOLIA.COM

514.457.7555

RÉSIDENTIEL- MUNICIPAL-INSTITUTIONNEL



4 Arboretum Morgan

Le Feuillard | Printemps 2014

Le Feuillard | Printemps 2014

Arboretum Morgan

5

To Sainte-Anne-de-Bellevue
and Senneville residents

This is to let you know that, unfortunately, the subsidy for memberships from your municipality has been cut back for 2014-2015. Senneville has eliminated the subsidy and Sainte-Anne-de-Bellevue is reducing its pledge from 33% to 20% of the membership fee. We hope that this will not stop you from renewing your membership, as we continue to rely on local support to maintain our activities and pursue our mission. We will lobby the municipal authorities to reinstate the subsidies in the near future. In the meantime, don't forget that Senneville and Sainte-Anne just wouldn't be the same without the Arbo!

Continued from page 2
When Yolande failed to notice them or if they wanted more food, they would silently swoop down over her head, or the dogs' heads, to draw her attention. Although Yolande often speaks to them, clicking her tongue to call them down, they are mostly taciturn, which is unusual for crows. Perhaps these intelligent animals understand that humans do not share their language, or perhaps they wish to prevent other crows from discovering Yolande's bounty.

I often walked with Yolande and her crows seemed to recognize me and would often follow me on the days when she was absent. In summer, Yolande usually returns to her native La Rochelle for a month or so, and one summer, I promised to feed her crows while she was away. But, although they would follow me and swoop down low over my head, they only took food from me on a couple of occasions.

Another thing Yolande has noticed is that the birds will take the kibble and, instead of eating it right away, cache it (we noticed them hiding it in a hole in the ground) and return for more. Caching is used by crows (and other birds and animals) to provide a source of food in times of scarcity.

Over the years, the crows come and go, usually in groups of three or four and never more than five or six. During breeding season in early summer, their visits often become scarcer or they disappear altogether, presumably because they are busy sitting on the eggs or feeding the young in the nest. Like many species of corvids, the actual parents are not the only ones caring for the young. The offspring of previous years will help

the biological parents take care of the current year's brood by helping with nest building, guarding the territory, acting as sentinels, mobbing predators or even feeding the nestlings. Crows do not breed until they are at least two years of age, and the average age at first breeding is four.

In addition, Yolande's crows often disappear for long stretches in the winter, particularly during cold spells. This may be because American Crows often spend winter nights in communal roosts, containing anywhere from a few hundred to a few million birds, up to 50 km away from where they forage. Yolande's birds may, in fact, spend the night in the large roost in the Montreal West-Turcot Yards-Côte Saint-Luc area, about 35 km from the Arbo¹. One possible explanation for their winter absences is that the flight to the Arbo from Montreal's west end may be not energy-efficient on cold winter mornings when food can be found closer to the roost. According to researchers, one function of the winter roosts may be for the birds to exchange information on food sources. Another explanation may be that the Arbo crows are roosting too far away to make it to the Arbo in time to see Yolande, an early riser, in the depths of winter. This winter, we have only had a few visits from our friends and they usually don't arrive until the end of our walk.

It must be pointed out that, if crows were gulls or pigeons, Yolande would be deluged with a flock of hungry birds. At certain times of the year, dozens if not hundreds of crows can be found in and around the Arbo, but no more than a half-dozen have appeared at a single time to feed. We think Yolande's crows consist of a small, and relatively constant, group of individuals since, while Yolande is feeding her birds, we often see other crows nearby, calling from the tops of trees, but they do not descend to the ground to eat.

Furthermore, owing to one characteristic of the American Crow, which has a fairly high prevalence of partially leucistic², or pale birds, particularly on the wings, Yolande has been able to identify one individual who has been following her in recent years. "White-wing" has a small white patch on one wing and we think he or she (the sexes are indistinguishable in crows) has been following Yolande for about four or five years now.

A landmark event in the relationship between Yolande and her crows occurred a few summers ago. Just as she was getting ready to leave on her annual pilgrimage to France we noticed that a group of four or five crows began to appear, including White-wing, and several of them were behaving differently than usual. We realized that, for the first time, some of the recently fledged young of that spring were accompanying the adult crows. The young were begging for food from the "parent" (either the biological parent or one of the older offspring,

Continued on page 8

¹ Information provided by Lance Laviolette. On winter afternoons, you can see the crows streaming into the west end of Montreal from all directions. The actual location of the roost may shift from year to year. About a decade ago, the roost numbered about 10,000 birds but now is down to around 1,500 birds.

² Leucism is an abnormal plumage condition caused by a genetic mutation that prevents the normal pigment from being deposited on the feathers.

Support
your local greenspace
Become a Corporate Member

Contact Mary Ann Pavlik
514-398-7811



A tick waiting for a host with front legs extended by Ghiribizzo (Flickr)

Continued from page 5
Ticks do not fly, nor can they run fast or jump. They are very passive creatures and sometimes spend very long periods of time waiting for the right host to come by. Throughout their life stages, ticks will seek out warm-blooded hosts on which to attach and feed. Doing so requires climbing up the stalk of grasses and shrubs and simply waiting with legs outstretched. Once a host wanders by and brushes against the tick, it will quickly climb up onto the body and seek out a warm place to insert its mouthparts and begin feeding. A tick bite itself is usually painless, but may result in some localized swelling and irritation.

Tactics to avoid ticks resemble those for avoiding mosquitoes. However, extra caution should be exercised when entering tick habitat. Preferred habitat for ticks is long grass or shrubs where there is adequate shade and animal activity. This usually includes forest edges and trail borders. Cool areas are important for tick survival, since desiccation from sun exposure can be a real threat to these pint-size parasites. **Tucking your pants into your socks is one of the best ways to avoid tick bites.** Safety should be your number-one concern when out in the woods.

33, rue St-Pierre
Ste-Anne-de-Bellevue (Québec)
H9X 1Y7
Tél.: (514) 457-5731
Fax: (514) 457-5731

MARCHÉ J. RAYMOND RICHARD
ET FILS INC.

MARCHÉ RICHELIEU

Emerald Ash Borer

Some of you will remember the impact of Dutch Elm Disease on our majestic Elm trees in Ottawa and Montreal in the 70's. Today, we are facing the threat of the Emerald Ash Borer (EAB). This exotic pest is threatening to eradicate our ash population. EAB originated in Eastern Asia and is believed to have travelled in crating material on ships to the ports of Detroit and Windsor in the 1990's. Detected in Michigan in 2002, the pest has rapidly spread into adjacent states and Ontario, and was first detected on the Island of Montreal in 2011. The forecast is that in the near future it is likely to wipe out Montreal's 200 000 ash trees in the public domain as well as nearly as many ash trees on privately owned land. That is if we don't find ways to slow down its progression. In this regard, everyone should know that **EAB's main vector is humans**, mainly through the transport of firewood over great distances. The [Canadian Food Inspection Agency web site](#) provides useful instructions as to how to help prevent the spread of EAB.

Early detection is a key element in the battle to contain the infestation and delay its spread. However, detection can be tricky and is time consuming. This is why New York State and Vermont authorities rely on citizens who are willing to volunteer their time and become part of a team of First Detectors. Birders are especially good at this task since woodpeckers are probably our greatest ally in this fight. These birds seem to have found a delectable food source in the pupa/larva of the pest which is buried under the bark of ashes. Should you be interested in learning more about this pressing issue and in getting involved in detection, we can provide support and training. **Contact Anne Godbout at anne.godbout@mcgill.ca or 514-398-8697.**

If you find a tick, it is recommended that you remove it promptly. The longer the tick is attached, the greater the chance of experiencing a reaction, or contracting a potentially harmful disease. The incidence of tick bites at the Arboretum is something that the staff would like to be made aware of. The relationship between ticks and local climate is somewhat of a hot topic and local changes in climate may result in even more cases of tick bites. Dogs are typically the first to pick up ticks as they tend to spend more time rummaging through long grass. So please, if you find a tick either on your dog or on your person, remove it carefully and please let us know promptly! A quick glance through reputable online sources will also provide further information on what you should do if you do happen to find a tick on you. Your local veterinarian will also be able to provide some valuable information on how to properly care for your favorite furry companions. 🌿

PRÉSERVATION DES ARBRES MATURES
CARE AND PRESERVATION

Arborfolia

- Élagage
- Fertilisation
- Haubanage
- Évaluation
- Pruning
- Fertilization
- Tree guying
- Evaluation

Arboriculteur certifié
certified arborist
QU-0102A

WWW.ARBORFOLIA.COM 514.457.7555

RÉSIDENTIEL- MUNICIPAL-INSTITUTIONNEL

The birds overwintering
at the Arboretum
are fed by:



Bird Protection
Protection des oiseaux
Quebec du Québec

www.birdprotectionquebec.org

Continued from page 6

as previously discussed) by adopting a begging posture (wings drooped and trembling, beaks open) and making nasal begging calls. The parent would take food from Yolande and then feed it to the babies, who begged like crazy

for more by stretching their necks and gaping their beaks. We were not sure but thought that perhaps the parent could be passing along the knowledge of a reliable food source (i.e., Yolande) to the young. Were Yolande's crows actually a family group, which, according to researchers, may consist of up to 15 related individuals and young from five different years?

In any case, we concluded that this episode indicated an additional level of "trust" in Yolande by the birds. We wonder if this behaviour will indeed be passed along to future generations and how many actual generations of

crows in the Arboretum have been, and will be, fed by Yolande.

For more information on the American Crow, see http://www.allabout-birds.org/guide/American_Crow/.

Update: Although White-wing appeared a few times this winter to ask for handouts, he has not been around this spring and has been replaced by two all-black, and thus unidentifiable, brethren. Although this is pure speculation, we hope he has found a territory of his own and is breeding this year. 🌿

Morgan Arboretum Association

Established in 1952



**Dedicated to forest conservation
and environmental education**

Morgan Arboretum

21,111 Lakeshore Road P.O. Box 186
Macdonald Campus
Sainte-Anne-de-Bellevue, QC, H9X 3V9

Tel.: 514-398-7811

Fax: 514-398-7959

Email: morgan.arboretum@mcgill.ca

Web Site: www.morganarboretum.org

THE LEAFLET

is published in English and French,
twice a year in April and September

English revision:

Jenny Anderson & Betsy McFarlane

French translation:

Anne-Marie Pilon

Cover page photographs:

Gina Bobinac & Frans Lecluse

Commemoration

Contact Anne Godbout at 514.398.8697

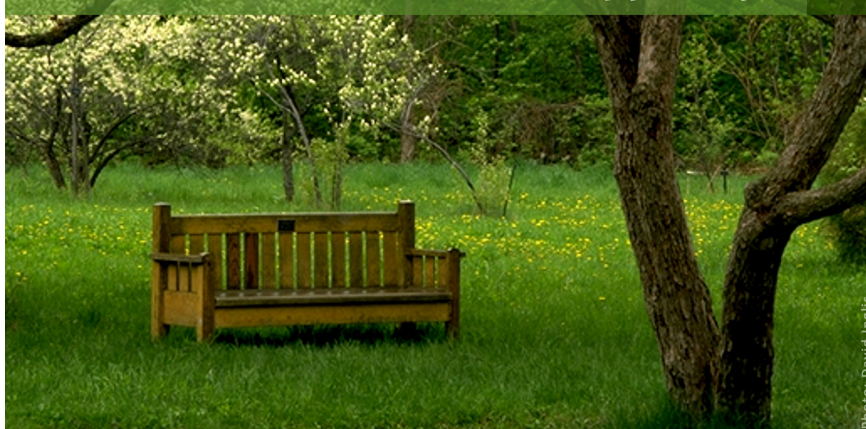


Photo: David Inglis

**IMPRESSION
NUMÉRIQUE,
ENSEIGNES
et GRANDS
FORMATS**

Brochures ■ Dépliants ■ Cartes postales ■ Accroches-portes ■ Affiches
Cartes de souhaits ■ Pochettes ■ Cartes d'affaires ■ Autocollants
Calendriers ■ Signets ■ Enseignes ■ Coroplaste ■ Bannières rétractables
Stand pour bannières ■ Présentoirs ■ Oriflammes ■ Drapeaux-plumes
Chevalets de trottoir ■ Cadres lumineux ■ Habillage de véhicules



Infografilm
IMPRESSION NUMÉRIQUE ET GRAND FORMAT

www.infografilm.com • COMMANDEZ EN LIGNE!

450 200-2002

1694, boul. de la Cité-des-Jeunes, Les Cèdres (Québec) J7T 1K9